

LISTING OF CLAIMS

1 1. *(Twice amended)* A system for stabilizing a floating catenary anchor leg mooring
2 system used in the production of oil from subsea reservoirs comprising:

3 a non-submersible hollow buoy assembly for [floating] continuous floatation on
4 the sea surface;

5 said non-submersible hollow floating buoy assembly including a cylindrical hull
6 portion having a center of gravity which is below the sea surface;

7 said cylindrical hull portion further including a ballast compartment having a
8 portion below the sea surface;

9 said ballast compartment being constructed and arranged to adjust the natural
10 pitch and roll periods of said non-submersible hollow buoy assembly to reduce pitch and
11 roll in response to wind and wave forces;

12 means for providing a path for oil to travel from the subsea reservoirs to a tanker.

1 2. *(Previously amended)* The system for stabilizing a floating catenary anchor leg
2 mooring system as defined in Claim 1 wherein said ballast compartment is constructed and
3 arranged to be filled with sea water.

1 3. *(Canceled)* The catenary anchor leg mooring system as defined in Claim 1
2 wherein said ballast compartment is constructed and arranged to increase the inertia of said
3 shallow draft cylindrical hull portion to reduce the roll and pitch of said cylindrical hull portion
4 in response to wind and wave forces.

1 4. *(Previously amended)* The system for stabilizing a floating catenary anchor leg
2 mooring system as defined in Claim 1 wherein said cylindrical hull portion has a diameter which
3 is greater than two times its height.

1 5. *(Previously amended)* The system for stabilizing a floating catenary anchor leg
2 mooring system as defined in Claim 4 wherein said ballast compartment is substantially
3 cylindrical and follows the circumference of said cylindrical hull portion.